

LISTING OF CLAIMS:

1. (previously presented) An apparatus, comprising:

a surface having a plurality of cells, including end-of-life-cell, each cell in said plurality having a corresponding plurality of nanostructures disposed between said surface and an electrolyte fluid;

a vitrifying substance or an altering compound disposed in said end-of-life cells such that said vitrifying substance or said altering compound is separated from said electrolyte fluid by said nanostructures; and

means for contacting said electrolyte fluid with said vitrifying substance or said altering compound in at least a first cell in said plurality of cells such that, upon contacting said vitrifying substance or said altering compound, at least a portion of said electrolyte is substantially immobilized or altered.

2. (previously presented) The apparatus of claim 1, wherein said means for contacting comprises means for decreasing the angle of contact between said electrolyte and said nanostructures such that said electrolyte penetrates said nanostructures.

3. (previously presented) The apparatus of claim 2, wherein said means for decreasing comprises means for applying a voltage to said nanostructures.

4. (previously presented) An apparatus for neutralizing an electrolyte fluid, comprising:

a surface having a plurality of cells, each cell in said plurality having a corresponding plurality of nanostructures disposed between said surface and said electrolyte fluid;

a vitrifying substance or an altering compound disposed on said surface; and

a voltage generator for applying a voltage to said nanostructures,

wherein, upon said voltage being applied to said nanostructures, the angle of contact between said electrolyte and said nanostructures decreases in a way such that said electrolyte penetrates said nanostructures, thus contacting said vitrifying substance or said altering compound.

5. (previously presented) A method for altering an electrolyte liquid in a battery, said battery comprising an electrode, said electrode comprising a surface having a plurality of nanostructures disposed thereon, said surface divided into a plurality of end-of-life cells, said method comprising:

selectively passing a voltage across a portion of the nanostructures in said end-of-life cells in a way such that said electrolyte fluid penetrates said nanostructures and contacts a vitrifying substance or an altering compound on said surface.

6. (previously presented) The method of claim 5, wherein said vitrifying substance comprises multifunctional monomers and polymerization initiators.

7. (previously presented) The method of claim 6, wherein said multifunctional monomers comprises one or more acryamide, vinyl alcohol, polyethyleneglycol 400 diacrylate or acrylic acid monomers.

8. (withdrawn) The method of claim 5, wherein said altering compound comprises a neutralizing substance.

9. (withdrawn) The method of claim 8, wherein said altering compound comprises calcium hydroxide.

10. (previously presented) The apparatus of claim 1, wherein said vitrifying substance comprises multifunctional monomers and polymerization initiators.

11. (previously presented) The apparatus of claim 10, wherein multifunctional monomers comprises one or more acryamide, vinyl alcohol, polyethyleneglycol 400 diacrylate or acrylic acid monomers.

12. (previously presented) The apparatus of claim 1, wherein said apparatus is a battery.

13. (previously presented) The apparatus of claim 1, wherein said apparatus is a thermostat.